

Abstract

A 1 dimensional or 2 dimensional array of micromirror devices comprises a device substrate with a 1st surface and a 2nd surface, control circuitry disposed on said 1st surface and a plurality of micromirrors disposed on said 2nd surface.

Each micromirror comprises a reflective surface that is substantially optically flat, with neither recesses nor protrusions. Such a 1 dimensional or 2 dimensional array of micromirror devices may be used as a spatial light modulator (SLM).

Methods of fabricating arrays of micromirror devices are also disclosed. Such methods generally involve providing a device substrate with a 1st surface and a 2nd surface, fabricating control circuitry on the 1st surface, and fabricating micromirrors on the 2nd surface, such that the reflective surfaces of the micromirrors are substantially optically flat, with neither recesses nor protrusions.